

Recombinant human PAI1 (mutated S338C) protein ab92773

1 图像

描述

产品名称	重组人PAI1 (mutated S338C)蛋白
生物活性	Specific activity: > 95 percent active by uPA titration; 1 mole NBD / mole PAI1. Excitation: 490 nm; Emission profile: 520 nm – 600 nm. Binding of uPA or tPA results in increase of peak at 540 nm.
纯度	> 95 % SDS-PAGE. ab92773 is > 98% pure by SDS-PAGE.
表达系统	Escherichia coli
Accession	<u>P05121</u>
蛋白长度	Full length protein
无动物成分	No
性质	Recombinant
种属	Human
修饰	mutated S338C

技术指标

Our **Abpromise guarantee** covers the use of **ab92773** in the following tested applications.

The application notes include recommended starting dilutions; optimal dilutions/concentrations should be determined by the end user.

应用	Functional Studies SDS-PAGE
形式	Liquid
补充说明	Protect from light. Solubility: > 2 mg/mL and < 5 mg/mL

ab92773 was created by mutagenesis of the P9 serine residue (Ser338) on the reactive center loop to cysteine. This then provided a free thiol group for incorporation of N,N'-dimethyl-N-(acetyl)-N'-(7-nitrobenz-2-oxa-1,3-diazol-4-yl) (NBD), a fluorescent probe highly sensitive to changes in solvation and hydrophobic environment. The fluorescence emission of P9-NBD PAI1 is enhanced 6-7 fold upon insertion of the reactive center loop into beta-sheet A following complex formation with proteinases, formation of the latent species, or cleavage by elastase. The incorporated probe is excited at 480 nm and displays a broad emission spectrum with a peak centered 542 nm with a

resultant blue-shift to 520 nm following reactive center loop insertion. The modified PAI1 is nearly as active as wt PAI-1 and is more resistant to the spontaneous latency reaction making this an excellent tool for monitoring reaction rates of PAI1. ab92773 has been utilized in a number of studies to determine the rates of loop insertion and SERPIN reaction mechanisms when reacted with various proteinases, inactivating antibodies and conformational changes imposed by the binding of vitronectin.

制备和贮存

稳定性和存储

Shipped on dry ice. Upon delivery aliquot and store at -80°C. Avoid freeze / thaw cycles.

pH: 6.60

Constituents: 0.82% Sodium phosphate, 0.0292% EDTA, 0.58% Sodium chloride

This product is an active protein and may elicit a biological response in vivo, handle with caution.

常规信息

功能

This inhibitor acts as 'bait' for tissue plasminogen activator, urokinase, and protein C. Its rapid interaction with TPA may function as a major control point in the regulation of fibrinolysis.

组织特异性

Found in plasma and platelets and in endothelial, hepatoma and fibrosarcoma cells.

疾病相关

Defects in SERPINE1 are the cause of plasminogen activator inhibitor-1 deficiency (PAI-1D) [MIM:613329]. It is a hematologic disorder characterized by increased bleeding after trauma, injury, or surgery. Affected females have menorrhagia. The bleeding defect is due to increased fibrinolysis of fibrin blood clots due to deficiency of plasminogen activator inhibitor-1, which inhibits tissue and urinary activators of plasminogen.

Note=High concentrations of SERPINE1 seem to contribute to the development of venous but not arterial occlusions.

序列相似性

Belongs to the serpin family.

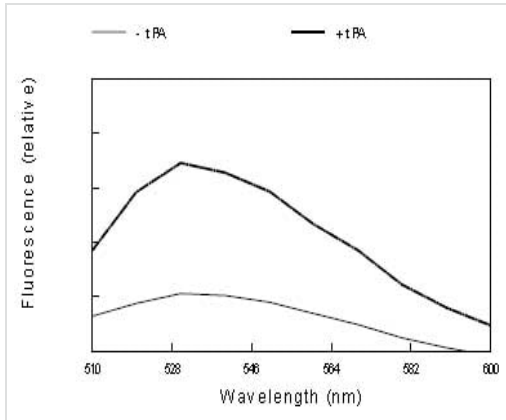
翻译后修饰

Inactivated by proteolytic attack of the urokinase-type (u-PA) and the tissue-type (TPA), cleaving the 369-Arg-Met-370 bond.

细胞定位

Secreted.

图片



Binding of uPA or tPA results in increase of peak at 540 nm.

Functional Studies - Recombinant human PAI1
(mutated S338) protein (ab92773)

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